

DIRECT TESTIMONY OF

MARK C. FURTICK, P.E.

ON BEHALF OF

DOMINION ENERGY SOUTH CAROLINA, INC.

DOCKET NO. 2019-212-E

1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND**
2 **OCCUPATION.**

3 A. My name is Mark C. Furtick. My business address is 220 Operation Way,
4 Cayce, South Carolina. I am the Renewable Energy Programs Advisor for
5 Dominion Energy South Carolina, Inc. ("DESC").
6

7 **Q. BRIEFLY STATE YOUR EDUCATION, BACKGROUND, AND**
8 **EXPERIENCE.**

9 A. I am a graduate of the University of South Carolina with a Bachelor of
10 Science degree in Mechanical Engineering, and I am licensed in South Carolina as
11 a Professional Engineer. I began my utility career in 1986 and have worked at
12 various positions in Electric Operations and Operations Support Engineering at
13 South Carolina Electric & Gas Company (now DESC). In 2015, I assumed the role
14 as Manager of Renewable Energy Programs and Technical Services where I helped
15 develop and have responsibility for Customer Scale Renewable programs, including
16 DESC's "Community Solar program" distributed energy resource program that was
17 approved by the Commission in Order No. 2015-512. On January 1, 2021, as a

1 result of the integration of Dominion Energy and SCANA Corporation, my position
2 title changed to Renewable Energy Programs Advisor.

3
4 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC SERVICE**
5 **COMMISSION OF SOUTH CAROLINA (THE “COMMISSION”)?**

6 A. Yes. I previously provided testimony to the Commission in Docket No.
7 2020-2-E, Docket No. 2020-63-E, and Docket No. 2019-182-E.

8
9 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

10 A. The purpose of my direct testimony is to explain DESC’s current Community
11 Solar Program and DESC’s understanding of what is required of DESC under S.C.
12 Code Ann. § 58-39-110, et seq., of the Distributed Energy Resource Program Act
13 (“Act 236”) and S.C. Code Ann. § 58-41-40, et seq., of the South Carolina Energy
14 Freedom Act (“Act 62”), as it relates to DESC’s Community Solar Program. I will
15 explain the structure of DESC’s Community Solar Program and its current
16 participants.

17
18 **Q. WHAT IS ACT 236 AND HOW DID ACT 236 SUPPORT DESC IN ITS**
19 **DESIRE TO CREATE A COMMUNITY SOLAR PROGRAM?**

20 A. Act 236 was passed by the South Carolina legislature and became effective
21 June 2, 2014. The purpose of Act 236, as described by the legislature, was to
22 “promote the establishment of a reliable, efficient, and diversified portfolio of

distributed energy resources” for the state of South Carolina. Among other things, Act 236 encouraged utilities to develop more programs to foster the expansion of renewable energy options for South Carolina customers. In this way, Act 236 aligns with DESC’s commitment to renewable energy. DESC has made a pledge to work towards achieving net zero emissions by 2050. DESC believes that investing in renewable energy, specifically solar energy, is extraordinarily important in accomplishing this goal. Dominion Energy’s solar portfolio recently ranked third by S&P Global Market Intelligence among utility holding companies in the U.S. and was ranked second among the thirteen largest utilities in the Southeast. The Southern Alliance for Clean Energy (SACE) has recognized DESC as a top-performing utility for installed solar for the past three years with 1,336 solar watts per customer which is over 3 times the average for the region. As for the Community Solar program, Act 236 was a key factor in allowing DESC to create its Community Solar program because it allowed for cost-shifting mechanisms and permitted utility companies to recover any reasonable costs related to their investments in those programs. The allowance of cost-shifting and subsidization can be explained because this was a new concept and the General Assembly saw this as a way to build awareness and create interest. As discussed above, a major reason DESC’s customers desired the Community Solar program as opposed to rooftop solar was because they did not want to install (or could not install) solar panels or maintain the solar panels. Allowing DESC to provide another avenue to employ solar generating and subsidize this new program/concept was crucial in

1 allowing DESC's Community Solar program to be successful and function as an
2 attractive option for customers.

3 **Q. DID ACT 236 REQUIRE UTILITIES TO CREATE A COMMUNITY**
4 **SOLAR PROGRAM?**

5 A. No. The language of Act 236 at S.C. Code Ann. § 58-39-120(A) states that
6 "an electrical utility *may* apply to the Public Service Commission for approval to
7 participate in the distributed energy resource program." (emphasis added)
8

9 **Q. WHEN DID DESC SUBMIT ITS ORIGINAL APPLICATION FOR THE**
10 **CREATION OF A COMMUNITY SOLAR PROGRAM?**

11 A. Shortly after Act 236 was enacted, in February 2015, the Original
12 Application detailed a program for:

13 [C]ustomers (a) who wish to participate in DER Programs but are
14 unable or are reluctant to install solar panels at their premises, (b) who
15 wish to take advantage of the economies of scale and lower costs
16 associated with large solar farms, or (c) due to lack of income or tax-
17 exempt status are unable to take advantage of tax credits associated
18 with the installing of DER.
19

20 The program approved pursuant to that application was administered pursuant to
21 DESC's "Rider to Retail Rates-Community Solar," which was approved by the
22 Commission on February 24, 2016, by Order No. 2016-155. Shortly thereafter, in
23 December 2016, the Commission approved the addition of a low-income

1 Community Solar offering to that rider.¹ This low-income offering is designed to
2 make solar energy available to low-income customers with no up-front costs, no
3 monthly fees, and no cost for operation or maintenance.
4

5 **Q. HOW LONG WILL CUSTOMERS RECEIVE CREDITS UNDER THE**
6 **COMMUNITY SOLAR PROGRAM?**

7 A. DESC designed an extended period of operation of the Community Solar
8 program at its inception. The current rider notes that DESC will issue a bill credit
9 to a participating customer for a 20-year initial term from the commercial operation
10 date for that customer's corresponding Community Solar renewable energy
11 generating facility, with a 15-year extended term, unless the time is reduced or
12 altered by the Commission or the Authorized Community Solar Developer. The
13 commercial operation dates for Springfield and Nimitz generating facilities
14 occurred in June 2018, while the Curie facility's commercial operation date
15 occurred in February 2019.
16

17 **Q. PLEASE EXPLAIN WHAT THE COMMUNITY SOLAR PROGRAM**
18 **ENTAILS.**

19 A. The Community Solar program remains a way for individuals who do not
20 want to (i) install (or cannot install) solar panels on their home or property, or (ii)

¹ The current Community Solar program is administered via the most-recently approved rider, which was approved by the Commission in Order No. 2017-494.

1 deal with the upkeep of solar panels to utilize renewable energy and gain savings on
2 their bills. Through the Community Solar program, customers can either purchase
3 or subscribe to a portion of the energy output from one of three Community Solar
4 energy generating facilities on the DESC system. In return, these customers receive
5 a credit on their monthly DESC bill.
6

7 **Q. PLEASE DESCRIBE THE COMMUNITY SOLAR RENEWABLE ENERGY**
8 **GENERATING FACILITIES THAT ARE UTILIZED BY THE PROGRAM.**

9 A. The current facilities were constructed by a project developer, which DESC
10 refers to as an Authorized Community Solar Developer. DESC currently has three
11 Community Solar Energy Generating facilities. There is one facility in Orangeburg
12 County called Springfield Solar, which is a 6 MW facility. There is also one in
13 Jasper County called Nimitz Solar, and one in Hampton County called Curie Solar.
14 Nimitz Solar is an 8 MW facility, and Curie Solar is a 2 MW facility. Together,
15 these three facilities result in 16 MW of solar generating capacity reserved for the
16 Community Solar program.²
17

18 **Q. WHAT CATEGORIES OF CUSTOMERS ARE ELIGIBLE TO TAKE**
19 **SERVICE UNDER THE COMMUNITY SOLAR PROGRAM?**

² As outlined in DESC's Application in this docket, the Credit Rate Agreement approved by the Commission via Order No. 2016-707 allowed for 16 MW of solar generating capacity.

1 A. Currently, DESC's Community Solar program serves three categories of
2 customers: (1) Residential; (2) Low-Income; and (3) Tax-Exempt Non-Residential.
3 Residential customers are individuals who are seeking to receive the benefit of solar
4 energy for their homes. Low-Income customers are individuals who are seeking to
5 receive the benefit of solar energy and have a household income equal to or less
6 than 200% of the current Federal Poverty Guidelines established by the U.S.
7 Department of Health and Human Services. DESC set aside a dedicated amount of
8 1,000 kW of solar capacity specifically for Low-Income customers to make sure
9 these customers are adequately represented under the program. Tax-Exempt Non-
10 Residential customers are entities receiving service under Rate 3, which is
11 Municipal Power Service, Rate 12, which is Church Service, and Rate 22, which is
12 School Service. As you can see, DESC serves a broad variety of customers under
13 the Community Solar program.

14
15 **Q. HOW DOES DESC ALLOCATE GENERATION ARISING FROM THESE**
16 **FACILITIES TO SPECIFIC PARTICIPATING CUSTOMERS?**

17 A. Community Solar is somewhat similar to DESC's existing net energy
18 metering programs (Solar Choice, for example) but provides an alternative for
19 residential and certain non-residential customers. With Community Solar, the
20 energy output of each facility is metered. Each participating customer receives a
21 bill credit each month for their pro-rata share of the Community Solar farm's energy
22 production that is valued at a predetermined credit rate.

1

2 **Q. HOW IS A PARTICIPATING CUSTOMER CHARGED AND CREDITED**
3 **FOR THEIR PRO-RATA SHARE?**

4 A. This depends on if the customer is a subscribing customer or a purchasing
5 customer. With the exception of our Low-Income participants, a subscription
6 customer subscribes, or “rents” panels for a monthly fee and, in turn, receives a
7 credit on their bill. A purchasing customer purchases an interest in a panel and
8 receives a credit on their monthly bill.

9 Under the subscription option, for all customers except Low-Income
10 Customers, there is a monthly fee of \$0.20 per KW of solar capacity subscribed.
11 The fees are applied to the customer’s monthly energy bill. Subscribing Customers
12 then receive a credit of \$.01 per kWh per month. Assuming normal operations,
13 because credits are awarded based on production basis (kWh) and fees are assessed
14 on a capacity basis (kW), monthly credits will exceed monthly fees. Subscription
15 customers can convert to ownership in years 6, 11, 16, and 20, with the option to
16 purchase panels at market value.

17 Purchasing customers can currently buy a single solar panel (i.e., capacity)
18 at roughly \$2.25/Watt DC. The average customer might require approximately 55
19 panels for a total off-set (enough capacity to produce the energy typically used
20 annually by the customer). A monthly credit of \$.10 per kWh is then applied to the
21 purchasing customer’s electric bill. Cumulative monthly credits are expected to

cover the purchase price of a panel by the 13th year of the program after which 100% of the bill credits can be applied to monthly usage charges.

The below chart illustrates how the credit is applied to a purchasing customer's bill:

Sample Calculation	Subscription	Purchase
Community Solar Production	1207 kWh	1207 kWh
Credit Rate	\$.01 per kWh	\$.10 per kWh
Credit	\$12.07	\$120.07
Allocated Capacity	5.848 kW	5.848 kW
Subscription Fee	\$0.2 per kW	n/a
Subscription Amount	\$1.17	
Credit Applied to Bill	\$10.90	\$120.07

Q. DO LOW-INCOME CUSTOMERS PAY SIMILAR FEES UNDER THE PROGRAM?

A. No. As noted above, Low-Income customers do not pay monthly fees. DESC has provided the Community Solar program to these participating customers with no up-front costs or monthly fees, since DESC was granted permission for its Low-Income program in 2016.

Q. FOR THE CURRENT COMMUNITY SOLAR PROGRAM, DO COSTS ALIGN WITH BENEFITS SO THAT THERE IS NO COST SHIFT OR SUBSIDIZATION?

1 A. No. Costs of this program are subsidized by all non-participating customers.

2
3 **Q. ARE ALL CATEGORIES OF PARTICIPATING CUSTOMERS**
4 **SUBSIDIZED BY NON-PARTICIPATING CUSTOMERS UNDER THE**
5 **CURRENT COMMUNITY SOLAR PROGRAM?**

6 A. Yes, all participants in DESC's Community Solar program enacted under
7 Act 236 benefit from cost-shifting. Without cost-shifting, participation would be
8 cost-prohibitive for many customers. Under the current program, all participating
9 customers receive benefits in excess of their contribution. This excess benefit is
10 covered by all non-participating customers. As discussed in greater detail by
11 Witness Kassis, this is permitted under Act 236, but not under any successor
12 programs arising from Act 62.

13
14 **Q. WHAT EFFORTS DOES DESC MAKE TO RECRUIT RESIDENTIAL**
15 **CUSTOMERS FOR ITS COMMUNITY SOLAR PROGRAM?**

16 A. DESC's Low-Income customers are typically referred to the program
17 through community organizations. In this effort, DESC partners with eight local
18 Community Action Agencies that are located in the territories that we serve, and
19 these agencies confirm their certification to qualify as Low-Income customers.
20 Upon qualifying, the agency refers that customer to DESC's Community Solar
21 program.

1 Over the years, DESC has otherwise advertised the Community Solar
2 Program through social media posts, in DESC's e-Newsletter, at conferences, on
3 DESC's website, through Direct Mail, press releases, and billing inserts.
4

5 **Q. HOW MANY CUSTOMERS CURRENTLY PARTICIPATE IN THE**
6 **COMMUNITY SOLAR PROGRAM?**

7 A. As of August 1, 2021, we have 163 Low-Income customers participating in
8 our Community Solar Program.

9 As of August 1, 2021, we have 840 Residential customers in the subscription
10 program and 37 Residential customers in the purchase program.

11 As of August 1, 2021, we have 19 Municipal rate customers, 16 School rate
12 customers, and 12 Church rate customers in the Tax-Exempt Non-Residential
13 subscription program.
14

15 **Q. HOW MANY CUSTOMERS ARE ON THE WAITLIST?**

16 A. There are currently 0 Low-Income customers on a waitlist and 36 Residential
17 customers on a waitlist for participation in Community Solar. Existing Tax-Exempt
18 Non-Residential customers may sign up for additional capacity as it becomes
19 available when other Tax-Exempt Non-Residential customers terminate their
20 subscription.
21
22

1 **Q. PLEASE EXPLAIN THE REVIEW OF ACT 236 COMMUNITY SOLAR AS**
2 **SET FORTH IN ACT 62.**

3 A. Among other things, I understand that Act 62 requires the Commission to
4 open a docket within 60 days of Act 62 becoming effective, so it can review each
5 electrical utilities' community solar programs established pursuant to Act 236 and
6 solicit status information on existing programs from the utilities. Act 62 further
7 requires that each electrical utility submit an updated report on their existing
8 programs and states that electrical utilities may propose new programs.

9
10 **Q. DOES DESC BELIEVE IT HAS COMPLIED WITH ACT 236 AND ACT 62**
11 **WITH RESPECT TO COMMUNITY SOLAR?**

12 A. Yes, as described in greater detail in DESC's application submitted in this
13 docket on April 15, 2021, DESC submitted an updated report to the Commission on
14 their Community Solar program on November 22, 2019. As that update indicated,
15 because of the cost-shifting prohibition in Act 62, DESC is not able to expand its
16 existing Community Solar program. Although Act 62 does not require DESC to
17 expand its existing program, it does recognize the change to a more mature market
18 and requires the utilities to align cost with benefits and move away from subsidies
19 and cost-shift. DESC would welcome an expansion to the program that complied
20 with Act 62 while also being a commercially viable choice for its customers.
21 However, that type of expansion is just not an option right now.

1 **Q. HOW IS DESC LIMITED IN ITS ABILITY TO EXPAND ITS**
2 **COMMUNITY SOLAR PROGRAM?**

3 A. While, at present, there is not any significant new demand for the program,
4 DESC remains committed to expanding access to renewable energy through its
5 Community Solar and other renewable programs in accordance with Act 62. As
6 explained by Witness Kassis, DESC is limited in the incentives it can offer to
7 customers, including low-income customers, given Act 62's restriction on cost-
8 shifting under any such expanded program.

9
10
11 **CONCLUSION**

12 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

13 A. Yes.